# Bi-weekly US ATLAS Computing Facilities Performance Review & other comments
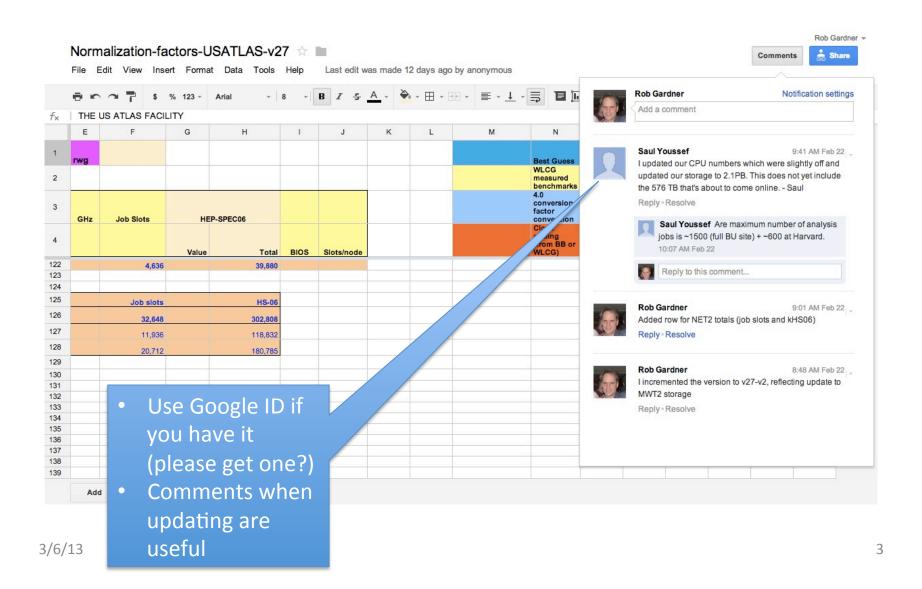
Rob Gardner

US ATLAS Computing Integration and Operations Meeting

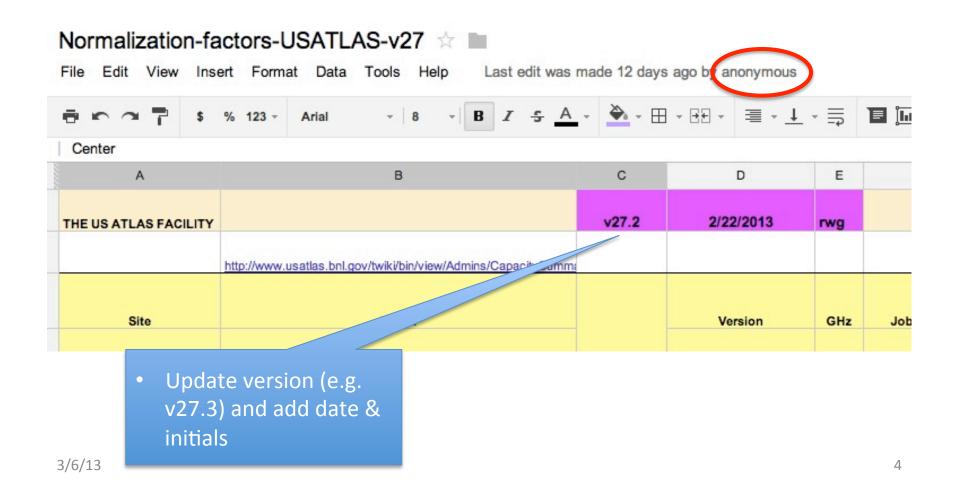March 6, 2013

# Very brief this week

- Facilities capacity updating
- Storage capacity report
- CPU-hours delivered
- Analysis availability
- Total throughput
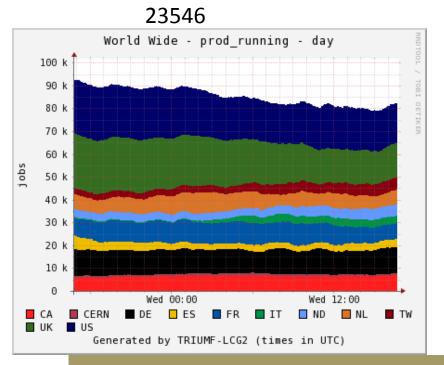- US ATLAS Computing Facilities meeting in Indianapolis

# Spreadsheet at v27.2

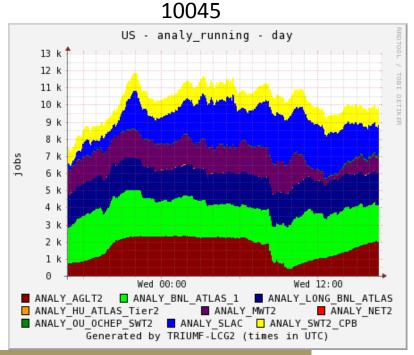Updates to https://www.usatlas.bnl.gov/twiki/bin/view/Admins/CapacitySummary



- Use Google ID if you have it (please get one?)
- Comments when updating are useful

# A little annotation helps

| Center | | Job Slots | ANALY slots |
|---|---|---|---|
| T1 | | 11,936 | 8952 |
| NET2 | | 3,364 | 2100 |
| SWT2 | | 4,636 | 3477 |
| MWT2 | | 5,996 | 4497 |
| AGLT2 | | 4,340 | 3255 |
| WT2 | | 2,760 | 2070 |
| Facility Total | | 33,032 | 24774 |
| Tier2 Total | | 21,096 | 15822 |

23546

10045





Delivering more than installed capacity; ~ ½ available analysis slots

# Reported storage capacity



Unchanged from last meeting

'S gone next meeting?

# Wall time delivered by federation (last week)

Scale is set by BNL which delivered 1.67M CPU-hours

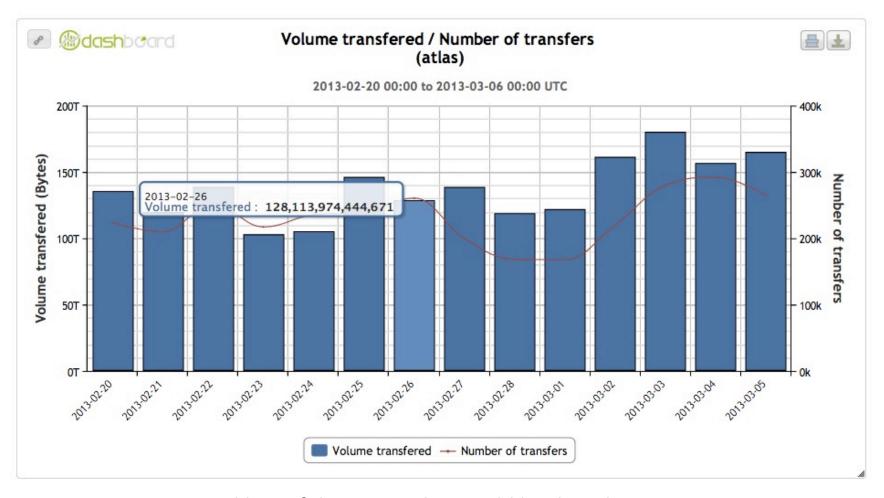US Tier 2s delivering between 360k – 1M CPU-hours

# Analysis availability

No significant problems

# Total data transferred from US sources



Lots and lots of deeper studies could be done here.
Good to note the scale at least... bit of an uptick this week.

## OSG All Hands

chaired by Robert Quick (Indiana University) , Fredrick Luehring (Indiana University)

from Monday 11 March 2013 at **08:00** to Thursday 14 March 2013 at **18:00** (US/Central)
at Indianapolis

Manage ▾

| | |
|---|---|
| **Description** | All times listed are local to the conference venue which is in the Eastern US Timezone (EST). |
| **Support** | goc@opensciencegrid.org |

**09:45 - 10:30**  ATLAS Tier 2/3 Workshop: IT-167
Convener:  Robert Gardner (University of Chicago)

    09:45  **What's next for the US ATLAS Computing Facility** 20'
        Speaker:  Robert Gardner (University of Chicago)

    10:05  **Cloud activities at BNL** 20'
        Speaker:  John Hover (Brookhaven National Laboratory)

**10:30 - 11:00**  Morning Break

**11:00 - 12:30**  ATLAS Tier 2/3 Workshop
Convener:  Robert Gardner (University of Chicago)

    11:00  **Out of the basement, into the cloud: virtualizing the Tier 3** 20'
        Speaker:  Lincoln Byrant (University of Chicago)

    11:20  **Elastic Colony Manager: Reactive Capacity Growth for Virtual Clusters** 10'
        Speaker:  David Champion (University of Chicago)

    11:30  **ATLAS and the PKI transition** 15'
        Speaker:  John Hover (Brookhaven National Laboratory)

    11:45  **US ATLAS Networking Open Discussion** 20'
        Speaker:  Shawn McKee (Univ. of Michigan)

| 14:00 - 15:30 | **Joint ATLAS/CMS Workshop** |
| | Conveners: Ken Bloom (University of Nebraska-Lincoln) , Robert Gardner (University of Chicago) , Rob Snihur (UNL/FNAL) |

**14:00** **Future Directions** *30'*
Speaker: Ian Fisk (Fermilab)

**14:30** **Any Data, Anytime, Anywhere** *20'*
Speaker: Dan Bradley (University of Wisconsin)

**14:50** **Federating ATLAS Storage using Xrootd** *20'*
Speaker: Robert Gardner (University of Chicago)

**15:10** **Operational issues supporting federated storage services and OSG** *20'*
Speakers: Brian Bockelman (University of Nebraska-Lincoln) , Robert Gardner (University of Chicago)

| 15:30 - 15:55 | Coffee Break |

| 15:55 - 16:30 | **Joint ATLAS/CMS Workshop: IT-152** |
| | Conveners: Ken Bloom (University of Nebraska-Lincoln) , Robert Gardner (University of Chicago) , Rob Snihur (UNL/FNAL) |

**15:55** **Networking Potpourri** *20'*
Speaker: Jason Zurawski (Internet2)

**16:15** **LHCONE and US LHC computing facilities** *15'*
Speaker: Shawn McKee (Univ. of Michigan)

| 16:30 - 17:30 | **WLCG and EGI Interoperations** |
| | *Contributors from EGI and WLCG talk about interoperability.* |
| | Convener: Rob Quick (Indiana University) |

**16:30** **Update on WLCG Operations Coordination and Commissioning Team** *20'*
Speaker: Maria Girone (CERN - WLCG Operatins)

**16:50** **WLCG Service Availability Monitoring (SAM)** *20'*
Speaker: David Collados (CERN - WLCG Monitoring)

**17:10** **EGI Operations and Interoperability with OSG** *20'*
Speaker: Peter Solagna (EGI - Operations Manager)

# Conclusions

- Did not look closely at throughput
- Otherwise the facility is delivering nicely
- Last month end of FY13Q2
  - So good to start thinking about updates to https://www.usatlas.bnl.gov/twiki/bin/view/Admins/SiteCertificationP24
- Starting to curate links here, for future use in meetings
  - https://www.usatlas.bnl.gov/twiki/bin/view/Admins/PerformanceDashboard
- In today's meeting we've noted a number of group tasks/issues that have facility-wide impacts:
  - SL6, OSG wn + DQ2, OASIS, OSG opp. access, PandaMover deprec., virtualizing Tier2s for Tier3s, LHCONE, etc..
- See some of you in Indianapolis!